

U.S. Appln. No. 09/891,061
Reply to Office Action dated February 22, 2006

PATENT
450100-03259

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) An image recording and reproducing apparatus comprising:
dividing means for dividing inputted image data to provide a plurality of image groups at every predetermined image unit;
first memory means grouped into groups in response to the number of said image groups and which can be accessed randomly;
second memory means;
generating means for generating an error-correcting code;
correcting means for correcting digital errors by said error-correcting code; and
recording control means for controlling said first memory means such that said first memory means record said image groups, controlling said generating means such that said generating means generates error-correcting codes of said image groups at every said image unit and controlling said second memory means such that said second memory means stores said error-correcting codes while cyclically changing a corresponding relationship between said image groups and said first memory means at every said image unit,

wherein during a normal playback, each group of the first memory means reproduces the image groups, and

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wherein during a high-speed playback, the groups of the first memory means
reproduce the image groups successively.

2. (Original) An image recording and reproducing apparatus according to claim 1, further comprising reproducing control means for controlling said groups of said first memory means and said second memory means such that said groups of said first memory means and said second memory means reproduce said image groups and said error-correcting codes over the range of said unit of identical images and controlling said error-correcting means such that said correcting means corrects digital errors of said image groups by said error-correcting codes in the once normal speed playback mode.

3. (Original) An image recording and reproducing apparatus according to claim 2, wherein said reproducing control means further controls said groups of said first memory means such that said groups of said first memory means reproduce said image groups over the range of said unit of images which are not identical to each other in the playback mode at speed higher than a once normal speed.

4. (Original) An image recording and reproducing apparatus according to claim 3, further comprising synthesizing means for synthesizing one image data of said image unit from said image groups of said unit of identical images reproduced and error-corrected by said reproducing control means in the once normal speed playback mode.

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5. (Original) An image recording and reproducing apparatus according to claim 4, wherein said synthesizing means further synthesizes one image data of said image unit from said image groups of said units of images which are not identical to each other reproduced by said reproducing control means in the playback mode at speed higher than a once normal speed.

6. (Currently Amended) An image recording and reproducing apparatus comprising:

dividing means for dividing inputted image data to provide a plurality of image groups at every predetermined image unit;

first memory means grouped into groups in response to the number of said image groups and which can be accessed randomly;

second memory means; generating means for generating an error-correcting code; correcting means for correcting digital errors by said error-correcting code;

recording control means for controlling said first memory means such that said first memory means records said image groups, controlling said generating means such that said generating means generates error-correcting codes of said image groups at every said image unit and controlling said second memory means such that said second memory means stores said error-correcting codes while cyclically changing a corresponding relationship between said image groups and said first memory means at every said image unit;

reproducing control means for controlling said groups of said first memory means and said second memory means such that said groups of said first memory means and said second memory means reproduce said image groups and said error-correcting codes over the range of said unit of images which are identical to each other and controlling said correcting

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means such that said correcting means corrects digital errors of said image groups by said error-correcting codes in the once normal speed playback mode and further controlling said groups of said first memory means such that said groups of said first memory means reproduce said image groups over the range of said unit of images which are not identical to each other in the playback mode at speed higher than the once normal speed; and

synthesizing means for synthesizing one image data of said image unit from said image groups of said unit of identical images reproduced and error-corrected by said reproducing control means in the once normal speed playback mode and further synthesizing one image data of said image unit from said image groups of said unit of images which are not identical to each other reproduced by said reproducing control means;

wherein during a normal playback, each group of the first memory means reproduces the image groups, and

wherein during a high-speed playback, the groups of the first memory means reproduce the image groups successively.

7. (Original) An image recording and reproducing apparatus according to claim 6, wherein said first memory means or said second memory means is a hard disk or an optical disk.

8. (Original) An image recording and reproducing apparatus according to claim 6, wherein said error-correcting code is a parity code.

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9. (Original) An image recording and reproducing apparatus according to claim 6, wherein said image recording and reproducing apparatus is a video and/or audio server or a video server.

10. (Currently Amended) An image recording and reproducing method comprising the steps of:

a first step of dividing inputted image data to provide a plurality of image groups at every predetermined image unit;

a second step of recording said image groups by first memory means grouped into groups in response to the number of said image groups and which can be accessed randomly while a corresponding relationship between said image groups and the groups of said first memory means is being cyclically changed at every said image unit; and

a third step of generating error-correcting codes of said image groups at every said image unit and storing said error-correcting codes by second memory means,

wherin during a normal playback, each group of the first memory means reproduces the image groups, and

wherin during a high-speed playback, the groups of the first memory means reproduce the image groups successively.

11. (Original) An image recording and reproducing method according to claim 10, further comprising a fourth step in which said image groups and said error-correcting codes are reproduced from said groups of said first memory means and said second memory means over

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the range of said unit of images which are identical to each other and in which said image groups are error-corrected by said error-correcting codes in the once normal speed playback mode.

12. (Original) An image recording and reproducing method according to claim 11, further comprising a fifth step in which said image groups are reproduced from the groups of said first memory means over the range of said unit of images which are not identical to each other in the playback mode at speed higher than the once normal speed.

13. (Original) An image recording and reproducing method according to claim 12, further comprising a sixth step in which one image data of said image unit is synthesized from said image groups of said unit of identical images reproduced and error-corrected at said fourth step in the once normal speed playback mode.

14. (Original) An image recording and reproducing method according to claim 13, further comprising a seventh step in which one image data of said image unit is synthesized from said image groups of said unit of images which are not identical to each other reproduced at said fifth step in the playback mode at speed higher than the once normal speed.